

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: BIG BROOK BOG	Lake Area (ha): 15.01
Town: PITTSBURG	Maximum depth (m): 2.4
County: Coos	Mean depth (m): 1.4
River Basin: Connecticut	Volume (m ³): 216500
Latitude: 45°09'48" N	Relative depth: 0.6
Longitude: 71°13'41" W	Shore configuration: 1.13
Elevation (ft): 1946	Areal water load (m/yr): 31.87
Shore length (m): 1550	Flushing rate (yr ⁻¹): 22.10
Watershed area (ha): 630.7	P retention coeff.: 0.42
% watershed ponded: 0.0	Lake type: natural w/dam

BIOLOGICAL:

	6 February 1997	7 August 1996
DOM. PHYTOPLANKTON (% TOTAL) #1		DINOBRYON 40%
#2		CHRYSPHAERELLA 20%
#3		RHIZOLENIA 12%
PHYTOPLANKTON ABUNDANCE (units/mL)		
CHLOROPHYLL-A (µg/L)		7.85
DOM. ZOOPLANKTON (% TOTAL) #1		POLYARTHRA 34%
#2		NAUPLIUS LARVA 19%
#3		
ROTIFERS/LITER		179
MICROCRUSTACEA/LITER		116
ZOOPLANKTON ABUNDANCE (#/L)		340
VASCULAR PLANT ABUNDANCE		Common
SECCHI DISK TRANSPARENCY (m)		2.4 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		13.0
BACTERIA (E. coli, #/100 ml) #1		< 1
#2		
#3		

SUMMER THERMAL STRATIFICATION:

weakly stratified

Depth of thermocline (m): None
Hypolimnion volume (m³) : None
Anoxic volume (m³) : None

CHEMICAL:

Lake: BIG BROOK BOG

Town: PITTSBURG

	6 February 1997		7 August 1996	
DEPTH (m)			1.0	2.0
pH (units)			6.9	6.7
A.N.C. (Alkalinity)			10.0	8.2
NITRATE NITROGEN			< 0.05	< 0.05
TOTAL KJELDAHL NITROGEN			0.68	0.44
TOTAL PHOSPHORUS			0.012	0.016
CONDUCTIVITY (μ mhos/cm)			29.4	30.4
APPARENT COLOR (cpu)			65	75
MAGNESIUM			0.50	
CALCIUM			4.5	
SODIUM			< 1.0	
POTASSIUM			< 0.40	
CHLORIDE			< 2	< 2
SULFATE			3	3
TN : TP			57	28
CALCITE SATURATION INDEX			2.7	

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1996

D.O. S.D. PLANT CHL TOTAL CLASS

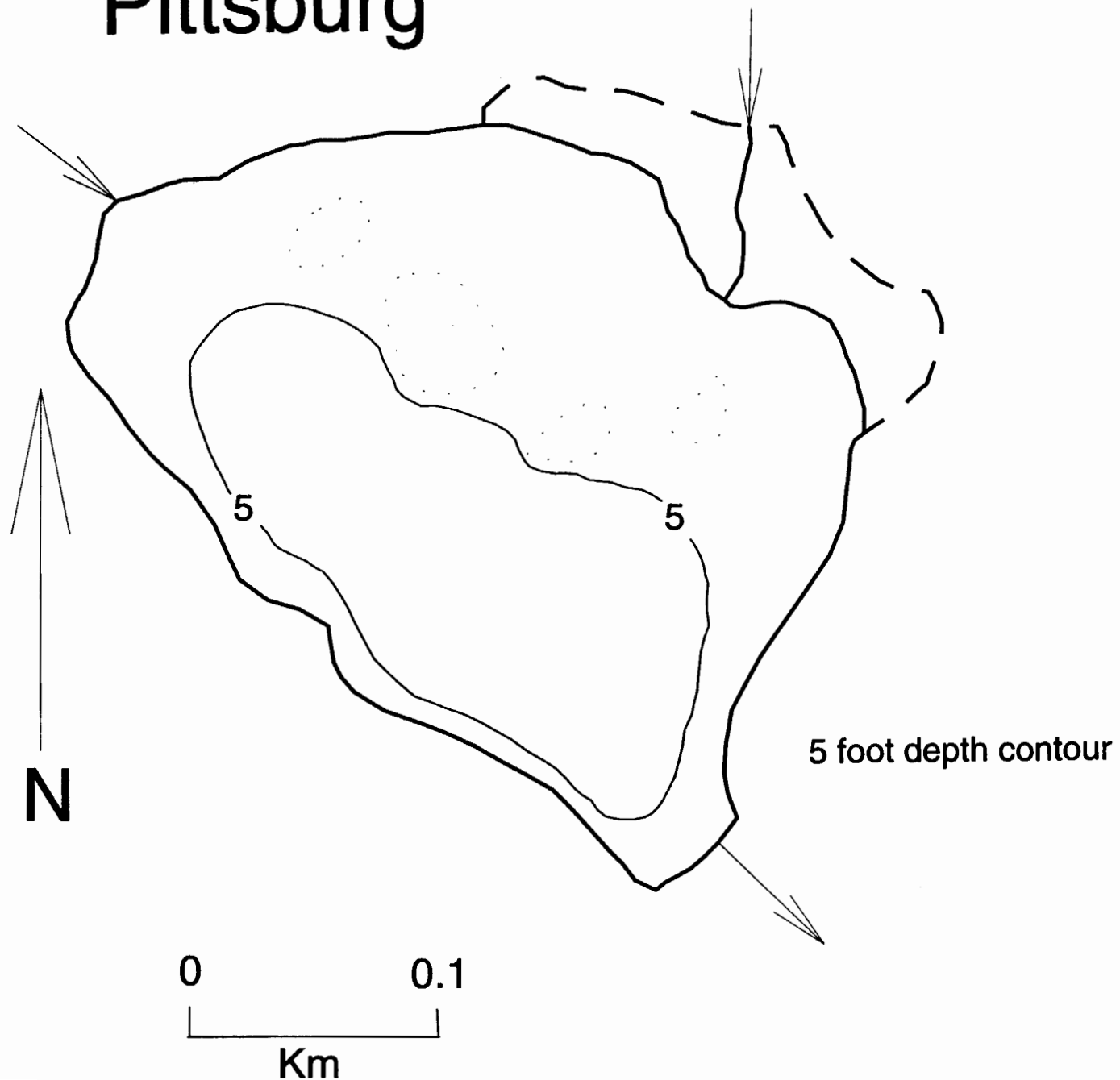
**	2	3	1	6	Meso.
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COMMENTS:

1. AKA Big Brook Pond.
2. No motors are allowed on this pond.
3. This is a somewhat remote pond accessible by a 4-wheel drive road in the summer. It was not sampled in the winter.
4. This is a shallow, tea-colored but non-acid pond.
5. Otters, a great blue heron and two adult and two juvenile loons were observed.

Big Brook Bog

Pittsburg



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TOWN: PITTSBURG
WEATHER: SUNNY, HOT, SLIGHT BREEZE

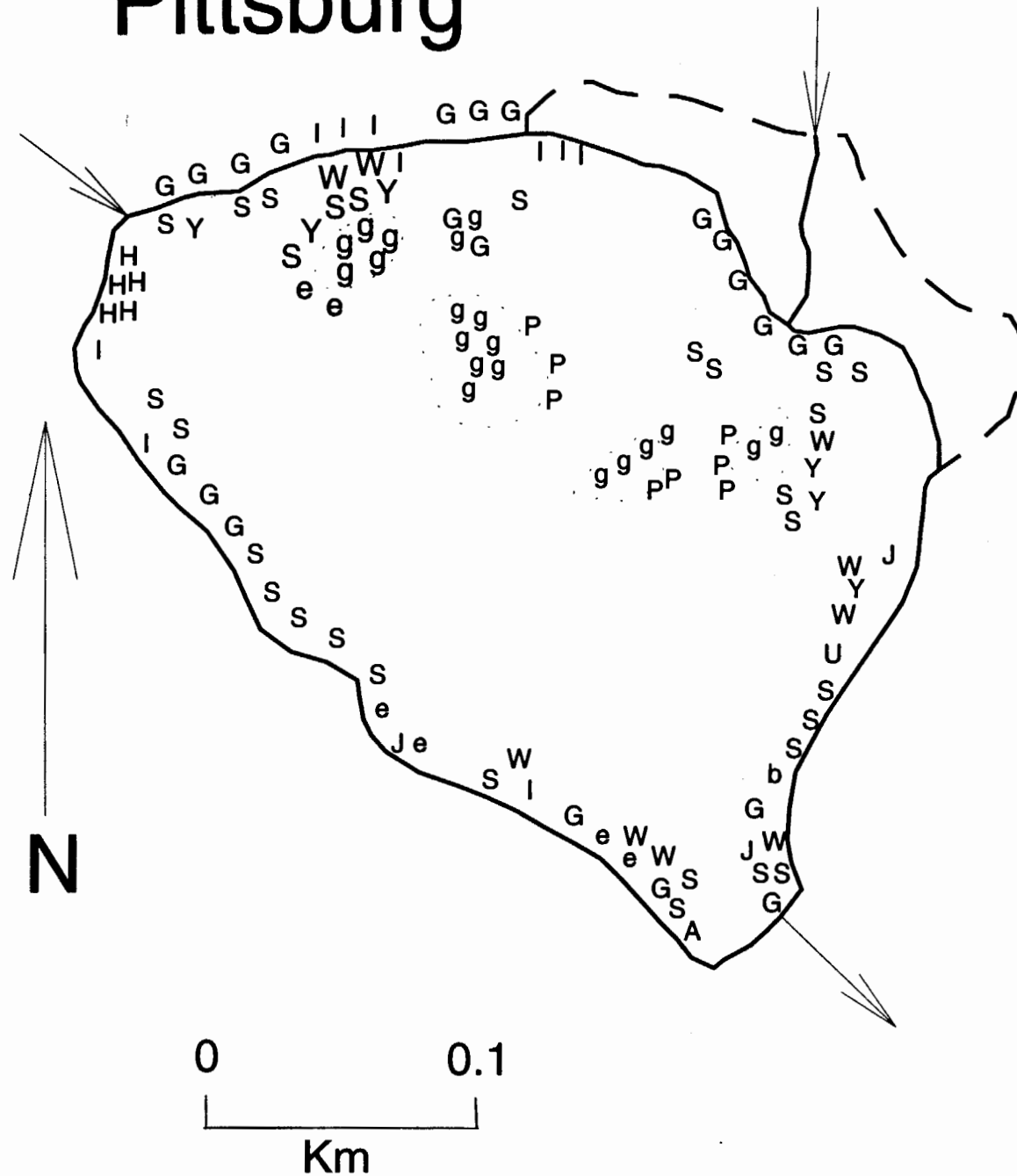
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SECCHI DISK (m): 2.4 VOB COMMENTS:
BOTTOM DEPTH (m): 2.4
TIME: 1130

*Dissolved oxygen values are in mg/L

Big Brook Bog

Pittsburg



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